# **PROGRAM ANNOUNCEMENT**

Fiscal Year 2008 Young Investigator Research Program AFOSR-BAA-2007-7

PROPOSAL DEADLINE: 4:00 p.m. Eastern Daylight Time Tuesday, 24 July 2007

### **OVERVIEW INFORMATION**

- Agency Name(s) –The Air Force Office of Scientific Research (AFOSR)
- Funding Opportunity Title Air Force Fiscal Year 2008 Young Investigator Research Program
- Announcement Type This is the initial announcement.
- Funding Opportunity Number AFOSR-BAA-2007-7
- Catalog of Federal Domestic Assistance (CFDA) Number 12.800 Air Force Defense Research Sciences Program
- Dates Proposals must be received by 4:00PM Eastern Daylight Time, 24 July 2007
- Additional Overview Content-- The Young Investigator Research Program supports young scientists and engineers in Air Force relevant disciplines and is designed to promote innovative research in science and engineering. The awards foster creative basic research in science and engineering, enhance early career development of outstanding young investigators, and increase opportunities to recognize Air Force mission and challenges in science and engineering.

### I. Funding Opportunity Description

The AFOSR's Young Investigator Research Program (YIP) is to support scientists and engineers who have received Ph.D. or equivalent degrees in the last five years (on or after 1 May 2002) and who show exceptional ability and promise for conducting basic research. The objective of this program is to foster creative basic research in science and engineering, enhance early career development of outstanding young investigators, and increase opportunities for the young investigators to recognize Air Force mission and the related challenges in science and engineering.

Proposals addressing the research areas of interest for the Air Force Research Laboratory will be considered. The basic research areas of current interest are available on-line at the AFOSR web:

http://www.afosr.af.mil (select "Research Areas")

For detailed information regarding technical goals, potential applicants are advised to refer to the announcement cited above and may contact AFOSR program managers listed therein to explore mutual interest before submitting proposals.

#### II. Award Information

Through this YIP competition, AFOSR plans to make approximately 15 awards for FY 2008, subject to the availability of funds. The anticipated types of awards will be grants or contracts. The estimated value of each award is \$100K but no more than \$120K per year, for three years. In FY 2007, 21 proposals were funded totaling \$6.8M for the three-year period. Five additional proposals were selected and awarded using other AFOSR BAAs.

### **III. Eligibility Information**

- 1. Eligible Applicants The individual award will be made to a U.S. institution of higher education, industrial laboratory, or non-profit research organization where the principal investigator is employed on a full-time basis and holds a regular position. Researchers working at the Federally Funded Research and Development Centers and Government Laboratories will not be considered for the YIP competition. The principal investigator must be a U.S. citizen, national, or permanent resident who has received a Ph.D. or equivalent degrees in the last five years as indicated in Section I above.
- 2. Cost Sharing Cost Sharing is not required.
- 3. Other An accompanying letter from the institution must be submitted to indicate that the applicant will be considered for a regular position, if he/she has a short-term appointment.

### IV. Application and Submission Information

- 1. Address to Request Application Package This announcement may be accessed from the internet at AFOSR's web site, <a href="www.afosr.af.mil">www.afosr.af.mil</a>. Click on "Need Funding" link and then "Research Opportunities." Solicitation title: Young Investigator Research Program. Also found at: <a href="www.grants.gov">www.grants.gov</a>. See 2(c) electronic submission for access instructions.
- 2. Content and Form of Application Submission The proposal may be submitted either electronically or in hard copy form, but not both. All proposers must include the SF 424 (R&R) form as the cover page. Unnecessarily elaborate brochures, reprints or presentations beyond those sufficient to present a complete and effective proposal are not desired.
- (a) Proposal Format
- \* Paper Size 8.5 x 11 inch paper
- \* Margin 1 inch
- \* Spacing single
- \* Font Times New Roman, 10, 11, or 12 point
- \* Page Limit no more than 20 single-sided pages. The grants.gov forms, abstract, budget, curricular vitae, letters of support (if any), and contract certifications, if required are excluded from the page limitation.
- \* Copies of hardcopy submissions one original and 5 copies, plus an electronic disc copy
- \* Content as described below
- (b) Advanced Preparation for Electronic Submission

Electronic proposals must be submitted through Grants.gov. There are several onetime actions your organization must have completed before it will be able to submit applications through Grants.gov. Well before the submission deadline, you should verify that the persons authorized to submit proposals for your organization have completed those actions. If not, it may take them up to 21 days to complete the actions before they will be able to submit applications. The process your organization must complete

includes obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registry (CCR), registering with the credential provider, and registering with Grants.gov. (Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called MPIN are important steps in the CCR registration process.) Go to

http://www.grants.gov/applicants/get\_registered.jsp. Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/section3/OrganizationRegCheck.pdf to guide you through the process. If a proposal is submitted through Grants.gov, PureEdge Viewer or Adobe will be needed. Pure Edge Viewer is a small, free program that will allow you to access, complete, and submit applications electronically and securely. For a free version of the software, visit the following web site:

www.Grants.gov/DownloadViewer. Should you have questions relating to the registration process, system requirements, how an application form works or the submittal process, call Grants.gov at 1-800-518-4726 or support@Grants.gov.

### (c) Electronic Submission

Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov, select "Apply for Grants", and then select "Download Application Package". Enter the Funding Opportunity Number for this announcement AFOSR-BAA-2007-7. Then follow the prompts to download the application package.

## (d) Hard Copy Submission

One original and 5 copies and one electronic copy (on a 3.5 inch Diskette or CD-ROM in Microsoft Word, or Excel, or PDF format) of the proposal should be submitted to:

Dr. Spencer Wu

Attn: Young Investigator Research Program Air Force Office of Scientific Research ATTN: Dr. Spencer Wu -PIE 875 North Randolph Street Suite 325, Room 3112 Arlington, Virginia 22203-1768

### (e) SF 424 Research and Related (R&R)

The SF 424 (R&R) form is to be used as the cover page for all electronic and hard copy proposals. No other sheets of paper may precede the SF 424 (R&R) for a hard copy proposal. A signed copy of the SF 424 (R&R) should be submitted with all hardcopy proposals. Complete all the required fields in accordance with the "pop-up" instructions on the form and the following instructions for the specified fields. To activate the instructions, turn on the "Help Mode" in Grants.gov. (The "Help Mode" is turned on by the icon with the pointer and question mark. This is located at the top of the form). The completion of the fields is self-explanatory.

### (f) Other forms

The following additional forms must be used for all electronic and hard copy proposals: R&R Budget form, R&R Senior/Key Person Profile form, R&R Project/Performance Site Locations form and R&R Other Project Information form. (Forms may be obtained at the grants.gov website.)

## (g) Certification

All awards require some form of certifications of compliance with national policy requirements. For assistance awards, i.e., grants and cooperative agreements, proposers using the SF 424 (R&R) are providing the certification required by 32 CFR Part 28 regarding lobbying. (The full text of this certification may be found at http://www.afosr.af.mil/Documents/funding\_GrantCertForm.htm) For contract awards, prospective contractors shall complete electronic annual representations and certifications at http://www.bpn.gov/orca in conjunction with required registration in the Central Contractor Registration (CCR) database. Prospective contractors shall update the representations and certifications submitted to ORCA as necessary, but at least annually, to ensure they are kept current, accurate, and complete. The representations and certifications are effective until one year from date of submission or update to ORCA. In addition to the ORCA representations and certifications, prospective contractors shall complete the AFOSR Contract Certification which can be located at http://www.afosr.af.mil/ResearchAreas/funding\_submitProp.htm. The AFOSR Contract Certifications are to be submitted at the time of proposal submission.

## (h) Proposal Narrative

Attach the proposal narrative to R&R Other Project Information form. The proposal narrative contains the abstract, technical proposal, budget and supplementary information, including curriculum vitae, as follows:

- i. Abstract Include a concise (not to exceed 300 words) abstract that describes the research objective, technical approaches, anticipated outcome and impact of the specific research.
- ii. Technical Proposal Describe clearly the research including the objective and approach to be performed keeping in mind the evaluation criteria listed in Section V of this announcement. Also briefly indicate whether the intended research will result in environmental impacts outside the laboratory, and how the proposer will ensure compliance with environmental statutes and regulations.
- iii. Budget The financial portion of the proposal must contain a cost estimate for the proposed effort including a description of cost sharing arrangements, if any. It is anticipated that the awards will have an initial performance period of twelve months with two twelve month options, assuming a 1 January 2008 effective date. However, the start date is subject to negotiations. Individual budgets should be provided for each period. Should a grant be awarded AFOSR will make payment to educational and non-profit recipients based upon a predetermined payment schedule. Payments will normally be made quarterly in advance of performance, based upon a spending profile which must be provided as part of

the proposal. Payments should be limited to the amounts needed to conduct research during each respective period. Educational and Non-profit organizations shall submit a spending profile with their cost proposal. Please submit a quarterly spending plan that will match the anticipated needs of the research. Estimates should consider major outlays for materials, equipment and other costs. Required funding during the academic year and summer will vary based on proposal research.

- iv. Contract Certifications If using grants.gov for submission of proposals include the contract certifications at the end of your proposal narrative.
- v. Curriculum Vitae Provide the principal investigator's eligibility information including the date PhD received. (or equivalent degree) and citizenship (national or permanent resident status).

### (i) Other Submission Requirements

Submission by facsimile, e-mail or other electronic media will not be accepted. The proposal must be complete and self-contained to qualify for review.

## (j) Human Subjects and Animal Use

i. Human Subjects - Each proposal must address human subject involvement in the research by addressing Field 1 and 1a of the R&R Other Project Information Form. If Field 1 indicates "Yes", the Air Force must receive a completed OMB form No. 0990-0263 before a contract, grant, or cooperative agreement may be awarded to support research involving the use of human subjects. Attach the document to the R&R Other Project Information Form. If using grants.gov, a completed OMB form No. 0990-0263 form shall be attached in field 11 of the R&R Other Project Information Form. The form is available electronically at: http://www.afosr.af.mil/Documents/funding\_ProtHumanSubj.doc

ii. Animal Use - Each proposal must address animal use protocols by addressing Field 2 and 2a of the R&R Other Project Information Form. If selected for award, additional documentation in accordance with Air Force standards will be required.

### (k) Application Receipt Notices

For electronic submission, the applicant will receive a confirmation page upon completing the submission to Grants.gov. The applicant will receive an email within a few hours of submission indicating that the proposal has been validated by Grants.gov. (This means that all the required fields have been completed.) The third notice the applicant will receive is an e-mail from the designated agency to which the electronic proposal was submitted, to acknowledge receipt of the proposal and provide the agency's assigned tracking number. The email is sent to the authorized representative for the applicant institution approximately ten days from the proposal due date. All proposers will be notified by letter or e-mail that the proposal has been received by AFOSR.

3. Submission Dates and Time - Proposals must be received at AFOSR by 4:00 PM, EDT, 24 July 2007

### V. Application Review Information

- 1. Criteria Proposals under this Broad Agency Announcement (BAA) will be evaluated through a peer or scientific review process, and selected for award on a competitive basis according to Public Law 98-369, Competition in Contracting Act of 1984, 10 U S C 2361, and 10 U S C 2374. All proposals will be evaluated under the following two primary criteria, of equal importance, as follows:
  - (a) The scientific and technical merits of the proposed research.
  - (b) The broader impacts of the proposed research (e.g., potentially to advance technology or/and to contribute to AF mission)

Other evaluation criteria used in the technical reviews, which are of lesser importance than the primary criteria is and of equal importance to each other, are as follows:

- (c) The proposer's qualification to conduct the proposed research.
- (d) How well does the proposed activity promote teaching, training, or/and technology transitioning/transfer.
- (e) The realism and reasonableness of proposed costs.

#### VI. Award Administration Information

- 1. Award Notices Principal Investigator of successful proposals will receive a notice, by letter or e-mail, on or about 19 October 2007. For those proposals being recommended for an award, the notification should not be regarded as an authorization to commit or expend funds. Proposals selected for funding as grants may include, at the recipient's own risk and to the extent that the recipient organization allows, charging to awards of 90 days pre-award costs. Negotiations may result in funding levels that are less than proposed. Only an award document signed by a Government Contracting/Grants Officer will bind the Government.
- 2. Reporting A performance report will be due to AFOSR each year. A final technical and patent report will be due after completion of the research. Copies of publications and presentations should be submitted along with the technical reports. For report content see <a href="http://www.afosr.af.mil/Documents/funding\_perfreportsFeb2006.pdf">http://www.afosr.af.mil/Documents/funding\_perfreportsFeb2006.pdf</a>. For grants, Financial Report SF-269 (or SF-272) is required by Part 32 of the DoD Grant and Agreement Regulations (DoD 3210.6-R)

### VII. Agency Contact(s)

Address questions to:

Dr. Spencer Wu

Telephone Number: (703) 696-7315 Facsimile Number: (703) 696-7320 Email: <u>Spencer.wu@afosr.af.mil</u>

#### Mail to:

Air Force Office of Scientific Research ATTN: Dr. Spencer Wu - PIE 875 North Randolph Street Suite 325, Room 3112 Arlington, Virginia 22203-1768

#### **VIII. Additional Information**

If the proposal is not selected for the Young Investigator Research Program Award, it may be reviewed and re-evaluated under the AFOSR BAA 2007-1 unless it is stated that this proposal is for the Young Investigator Research Program only.